106 FERC ¶ 61,038
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, and Joseph T. Kelliher.

FPL Energy Maine Hydro, LLC Project No. 2552-058 and 063

ORDER APPROVING SURRENDER OF LICENSE
AND PARTIAL REMOVAL OF PROJECT WORKS
AND DISMISSING REQUESTS FOR REHEARING

(Issued January 23, 2004)

1. This order grants an application filed by FPL Energy Maine Hydro, LLC (FPL Energy or licensee) for surrender of its license for the Fort Halifax Project No. 2552, located on the Sebasticook River, in Kennebec County, Maine. The application also seeks authorization for partial removal of the project dam. The order authorizes partial dam removal, to the extent and in the manner discussed below. In addition, the order denies requests for rehearing of a previous Commission order in this proceeding, as discussed below.

BACKGROUND

2. The 1.5-megawatt (MW) Fort Halifax Project is located on the Sebasticook River, a tributary of the Kennebec River, about 1,400 feet upstream of the confluence of the two rivers. The project includes a 553-foot-long, 29-foot-high concrete dam with a combined intake and powerhouse section, and a 5.2-mile-long reservoir with a surface area of 417 acres and a usable storage capacity of 1,000 acre-feet at the full-pond level of 51.5 feet mean sea level. The powerhouse contains two turbine-generator units with a total installed capacity of 1,500 kilowatts (kW).

3. The project was constructed in 1907-08. An original license for the project was issued to Central Maine Power Company (Central Maine) in 1968, for a term expiring on December 31, 1993, in Central Maine Power Co., 40 FPC 433 (1968). In 1992, the license was amended to require the installation of upstream fish passage facilities at the project by May 1, 1999. Central Maine Power Co., 61 FERC & 61,095 (1992). This

requirement was added to the license to reflect a 1987 agreement between the owners of several hydropower projects on the Kennebec and Sebasticook Rivers (Kennebec Hydro Developers Group, or KHDG) and the Maine fisheries agencies for the provision of fish passage at the projects by specified dates.

4. The Commission issued a subsequent license for the project in 1997, for a term of 39 years. Central Maine Power Co., 81 FERC & 61,249 (1997). The subsequent license included the upstream fish passage condition that had been incorporated into the original license. The order issuing the new license recognized that the project would cost more than the then-current cost of alternative power, but, consistent with Commission policy, left to the licensee the decision whether to accept the license. Central Maine Power Co., 81 FERC & 61,249 at 62,123.

5. In 1998, Central Maine and the other KHDG project owners entered into a new agreement (the KHDG Agreement) with the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (FWS), the State of Maine, and the Kennebec Coalition, comprising American Rivers, Inc., the Atlantic Salmon Federation, Trout Unlimited, the Kennebec Valley Chapter of Trout Unlimited, and the Natural Resources Council of Maine. Under the KHDG Agreement, the KHDG was to provide $4.75 million toward fish restoration in the Kennebec River Basin and removal of the Edwards Dam, the lowermost dam on the Kennebec. In addition, the KHDG licensees, with the support of the other parties to the agreement, were to seek amendment of their licenses to incorporate fish passage measures specified in the agreement. These amendments would allow the licensees to defer implementing the existing fish passage measures then required by their licenses.

6. In respect to the Fort Halifax Project, the KHDG Agreement provides for the installation and operation of a temporary fish pump and trap and transport facility, by May 1, 2000, for the capture of upstream migrating alewife (river herring) in quantities sufficient to meet the alewife restoration goals of the Maine Department of Marine Resources (Maine DMR). The agreement further provides:

> Unless licensee has surrendered its FERC license at Fort Halifax and FERC has ordered the dam to be decommissioned by summer 2003, licensee shall, by May 1, 2003, remove the temporary fish pump and all temporary shad collection mechanisms, and install and have fully operational a lift facility capable of successfully trapping and trucking and passing upstream American shad and river herring in quantities sufficient to meet established fishery management goals, and Atlantic salmon in quantities to meet the Atlantic Salmon Commission's goals. Licensee will not seek to eliminate or defer beyond 2003 the requirement to provide permanent fish passage

> (whether by permanent fish lift, removal, or partial removal) before FERC or other regulatory bodies . . . .

7. The agreement recites that the licensee recognizes and acknowledges that the resource agencies and the Kennebec Coalition are agreeing to allow the licensee to delay installation of a fish lift until 2003 to allow the licensee sufficient time to decide if continued operation of the project is economically viable.

8. Upon submission of the agreement as a settlement, the Commission, by order issued September 16, 1998, amended the licenses to include the fish passage requirements set forth in the agreement. Edwards Manufacturing Co., Inc., 84 FERC & 61,227 (1998). In 1999, the license for the Fort Halifax Project was transferred to FPL Energy. Central Maine Power Co., 85 FERC & 62,208 (1999). FPL Energy installed the fish pump, which continues to operate, and filed design drawings for the fish lift, which were approved, with modifications, in August 2001. FPL Energy LLC, 96 FERC & 62,179 (2001).

9. By application filed June 20, 2002, FPL Energy seeks to surrender the license, because it has concluded that the economics of the project do not justify the investment that would be required for the fish lift, which FPL Energy states would cost $4.1 million to install and $130,000 in annual operating and maintenance costs.[1] FPL Energy intends to provide fish passage by removing several sections of the dam, using controlled demolition. The application proposes removal of four piers and five spillway bays of the dam, totaling about 72 feet.[2] The remainder of the dam, as well as the powerhouse, would remain intact, but the headgates to the generating units would be closed, and the generating units would be disconnected from the electrical grid. The partial dam removal would lower the impoundment directly upstream of the dam by as much as almost 25 feet. FPL Energy anticipates that, if the Commission were to approve surrender of the

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[1] Application at p. 95.

[2] As described in the application, the reinforced concrete piers and face slabs would be weakened by selective concrete removal to expose the reinforcing steel. Explosive charges would be used to cut the reinforcing steel, and the weight of the water on the dam face would be used to cause the collapse of the sections that would form the breach. Heavy equipment would remove the debris remaining in the breach opening once the river level stabilizes. However, as noted in the text of this order, infra, FPL Hydro has since modified this proposal as to both the width of the breach and the removal process.

license by May 1, 2003, it would commence partial dam removal in May 2003 and complete the partial removal by mid-September 2003. It estimates the cost of this partial dam removal at $681,000.[3]

10. Notice of the application was issued on July 2, 2002. Motions to intervene were filed by Save Our Sebasticook, the U.S. Department of the Interior (Interior), the State of Maine State Planning Office (Maine Planning Office),[4] Atlantic Salmon Federation, American Rivers, Trout Unlimited, Friends of the Kennebec Salmon, Natural Resources Council of Maine, Ridgewood Power, LLC, and numerous local landowners.[5] The Commission staff issued a scoping notice on October 23, 2002, and conducted scoping meetings in Waterville, Maine, on November 7, 2002. The staff issued a Draft Environmental Assessment (EA) on January 7, 2003, and a Final EA on May 8, 2003. Numerous comments were received in response to the notice of the application, the scoping notice, and the Draft EA.

11. Interior, Maine Planning Office, Friends of the Kennebec Salmon, and the Kennebec Coalition, including the entities it comprises,[6] support partial removal of the dam, because this action would provide fish passage in accordance with restoration goals and convert the reservoir environment to a riverine environment. However, they express

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[3] Application at p. 94.

[4] Under Maine law, the Planning Office is designated to represent the position of all Maine agencies.

[5] Landowners seeking intervention include Jeffrey VandenHeuvel and Cathleen O'Connor, Wilma Lombardi, Jeffrey C. Harding, Mary Ellen and Ken Fletcher, Joseph and Roberta Dumont, Kenneth H. Eskelund, George Fortin, James Gorman, Kathryn Spofford, Patricia Gorman, Raymond and Therese Rossignol, Frank and Doreen Kimball, Jane Edwards and Wendell Goodrich, Emily and David Vaillancourt, Donna Laliberte, Donn G. Wolfe, Douglas Laliberte, Peter Laliberte, Arthur P. Pellerin, Berta M. and Terrence H. Estes, Margaret Williams, Sandra Pellerin, Catherine and Wayne Kruithoff, Richard Hughes, Shawn Fleury, and Joanna and Paul Bowen. The intervention requests of the Bowens, Fleury, Natural Resources Council, Harding, the Rossignols, Kennebec Salmon, Wolfe, the Kruithoffs, and Ridgewood Power were late-filed and were granted by notice issued April 25, 2003.

[6] All of the entities that Kennebec Coalition comprises filed motions to intervene, although the Coalition itself did not.

concern about how the dam removal process would affect various resources and about whether the proposed breach will be large enough to pass all species of fish under all flow conditions. Local landowners, Save Our Sebasticook, and the Town of Winslow, which abuts the dam on both sides of the river, are opposed to dam removal. They are concerned principally with preserving the reservoir and its environment, and with avoiding adverse environmental effects that they expect loss of the reservoir to produce. These effects include erosion, bank instability, exposed land, and contaminants; deterioration of the quantity and quality of sport fisheries; and loss of reservoir-dependent recreational uses.

12. In conducting its environmental analysis, staff considered surrender of the license with several different dam removal options: partial dam breach accomplished through controlled demolition, as the application proposed; the same partial dam breach accomplished through mechanical means; total dam removal by mechanical means; and decommissioning of the powerhouse only, with no dam removal. The staff also considered the option of denying the surrender application and maintaining project operation with the installation of a permanent fish lift, as provided by the KHDG Agreement; maintaining project operation with an improved fish pump; and the no-action alternative, continued project operation with the temporary fish pump. The staff did not recommend an alternative.

13. In response to concerns from Interior, Maine Planning Office, and the Kennebec Coalition that the 72-foot breach would not be adequate for effective upstream fish passage of shad and river herring under all flow conditions, FPL Energy, in its comments on the Draft EA, modified its proposal to expand the dam breach to six bays, totaling 87 feet. Under the modified proposal, FPL Energy would initially remove one 12-foot-wide bay using explosives, allow the reservoir to drain, and then remove the remaining bays by mechanical demolition. This method would reduce the initial volume and velocity of water through the breach and would extend the time required for the reservoir to drain. The widened breach would result in reduced velocities for fish passage during high-flow conditions. Staff considered this modified proposal in the Final EA.

STATUTORY CONSIDERATIONS

14. Water Quality Certification. Under Section 401(a)(1) of the Clean Water Act (CWA), an applicant for a federal license or permit to conduct an activity that may result in a discharge into waters of the United States must provide the licensing or permitting agency a certification from the state in which the discharge originates that the discharge would not violate the state's water quality standards. The federal agency may not authorize the activity unless certification has been obtained or the state has waived

certification through failure to act on the request for certification within one year after receipt of that request.

15. FPL Energy's proposal to partly remove the Fort Halifax dam could result in a discharge into the waters of the United States. On August 1, 2002, FPL Energy filed a request for water quality certification with the Maine Department of Environmental Protection (Maine DEP), which initially took the position that certification need not be issued before the Commission acts on the application. By letter filed February 11, 2003, Maine DEP states that, although it continues to hold this opinion, it waives certification for the application, to the extent that such certification is required for the Commission to act on the licensee's proposal.

16. Endangered Species Act. Section 7 of the Endangered Species Act (ESA) requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species. FWS states that the threatened bald eagle is the only federally listed species known to occur in the project area. Staff concluded, and FWS concurred, that the proposed action would not be likely to adversely affect the bald eagle.

17. National Historic Preservation Act. Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 C.F.R. Part 800) require federal agencies to take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (National Register). If an agency official determines that an undertaking may have adverse effects on properties listed or eligible for listing in the National Register, the agency official must afford an opportunity for the Advisory Council on Historic Preservation (Advisory Council) to comment on the undertaking. The NHPA also provides for the appointment of State Historic Preservation Officers (SHPO's) to facilitate the implementation of federal historic preservation policy at the state level, and for the responsible federal agency to consult with Native American Indian tribes that attach religious or cultural importance to historic properties under their jurisdiction.

18. The Maine SHPO, by letter of July 18, 2002, notified the Commission staff that the project, in its entirety, is eligible for listing in the National Register.[7] On October 29, 2002, the Commission staff sent a letter to the four federally recognized tribes with a

[7] In subsequent filings, the SHPO emphasized that the spillway section is part of the historic property and that its removal would adversely affect the entire historic property, rendering it ineligible for listing in the National Register.

potential interest in the proposed action, requesting their assistance in identifying historic properties and inviting their comments on potential effects. By letter of February 12, 2003, the Commission staff notified the SHPO, the Tribes, the Bureau of Indian Affairs, and the Advisory Council that the surrender would have an adverse effect on historic properties, because the project and project lands would no longer be subject to federal jurisdiction. The staff stated that partial or complete removal of the dam and rendering the project inoperable would also adversely affect the property.[8] On April 2, 2003, the Penobscot Indian Nation requested that it be included in any continuing consultation relating to cultural resources and in any archaeological investigations within the project area.

19. On March 20, 2003, the licensee filed with the Commission an agreement signed by it and the SHPO in regard to mitigation measures for archaeological resources in connection with a surrender. On June 17, 2003, the Commission staff executed a Memorandum of Agreement (MOA) with the SHPO and FPL Energy. The MOA provides that, if the Commission approves surrender of the license, the Commission will ensure the implementation of specified measures for documentation of historic resources, and the identification and documentation of archaeological sites, as reflected in the stipulations contained in the March 20 agreement. The MOA also provides that its adoption in a Commission order and the implementation of its terms are evidence that the Commission has completed compliance with Section 106 of the NHPA and the implementing regulations, and that, upon the effective date of the license surrender, the Commission will have no further obligations with respect to the MOA.[9] We are requiring the licensee to implement the MOA as a condition of the surrender.

DISCUSSION

Alternatives

20. Section 6 of the Federal Power Act (FPA), 16 U.S.C. ' 799, provides that licenses "may be . . . surrendered only upon mutual agreement between the licensee and the

[8] The letter requested the Advisory Council to advise the staff within 15 days whether it intended to participate in the process of resolving adverse effects. The Advisory Council did not respond.

[9] FPL Energy and the SHPO have indicated that any measures to be undertaken after the surrender becomes effective will be provided for in a private agreement that will not involve the Commission.

Commission after thirty days' public notice." Because the FPA does not contain any further statutory standard, the Commission, in acting on a surrender application, applies a broad "public interest" standard, which is not the same as the public interest/ comprehensive development standards applied to licensing proceedings by FPA Sections 4(e) and 10(a)(1).[10]

21. The filing of this surrender application was prompted by the licensee's need to satisfy requirements for fish passage at the project. Efforts to ensure fish passage at the Fort Halifax Project and at other dams on the Kennebec and Sebasticook Rivers reach back at least to 1985, when the Maine fisheries agencies developed the first plan to restore anadromous fish to the lower Kennebec River. Licenses for two projects were modified to reflect this plan,[11] and, as noted above, all of the KHDG project licenses were later amended to reflect first the 1987 and then the KHDG Agreement. In amending the licenses to reflect the changing schedules of the fisheries agencies for fish restoration in various reaches of these rivers, we have recognized the importance of fish passage at these projects and our role in promoting it. Ensuring that fish restoration goals will not be frustrated by a lack of fish passage at the Fort Halifax Project site is therefore a central issue in our consideration of the surrender application.

22. The state and federal fisheries agencies have targeted alewife, blueback herring, American shad, and Atlantic salmon for restoration in the Kennebec River Basin. The Final EA evaluated several alternatives that would provide some sort of fish passage, as well as surrender without any form of dam removal. Interior, the Maine agencies, and the Kennebec Coalition parties argue that fish passage must be provided by dam removal if the fish lift is not going to be installed. Maine Planning Office stresses that FPL Energy must fulfill its obligations to meet the state's restoration goals, since FPL Energy received significant fish passage deferral benefits from the KHDG Agreement. Though amenable to considering an alternative to the fish lift that would meet the State's restoration goals, Maine Planning Office states that FPL must comply with the agreement if an alternative cannot be found that would be acceptable to all of the KHDG parties. Interior argues that the Commission's 1999 amendment of the license was based on a significant and well-developed administrative record, and that any action other than requiring the fish lift or ordering dam removal would be undermine the KHDG Agreement and institute years of litigation.

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[10] Niagara Mohawk Power Corp. and Fourth Branch Associates (Mechanicville), 100 FERC & 61,185 at P 12-13 (2002).

[11] Central Maine Power Company, 61 FERC & 61,095 at 61,385 (1992).

23. Those who oppose breaching the dam urge us to provide for some form of fish passage that would allow the reservoir to remain. Most of these ask us to authorize the licensee to install a fish pump using the new, experimental, "Canavac" fish pump technology. They argue that use of such a pump for a season, or a few seasons, will not adversely affect fishery restoration goals if the pump proves inadequate. Some of the opponents request that we deny the surrender application and require installation of such a pump, the required fish lift, or other effective fish passage technology. Others ask us to invalidate or amend the KHDG Agreement to the extent that it permits only the options of fish lift installation or dam removal. Some note that the temporary pump has been meeting alewife stocking goals since its installation.

24. In comments on the Draft EA, Interior and Maine Planning Office express concern with the Canavac fish pump's collection of fish by means of a floating platform, which, they state, has never been used anywhere for purposes of concentrating fish for upstream passage; with the effect on fish of the pump's use of a vacuum; and with the effect on shad, which are vulnerable to handling. They argue that there is no data to indicate that the Canavac fish pump would be a safe and efficient method of passing fish other than alewife. Maine Planning Office also states that it could not support continued use of the existing fish pump, because other KHDG signatories have rejected it and because it is ineffective to pass shad.

25. The Final EA concluded that the Canavac fish pump would likely function much the same as a fish lift, and that survival rates of alewife passed by the pump, if handling were minimized, would likely be comparable to those of alewife passed by a fish lift. However, it acknowledged that fish pumps have apparently not been used for permanent fish passage at any other dams, and it concluded that even an improved fish pump would involve a risk of injury to shad, because the pump would require significantly more handling of fish than would a fish lift.[12]

26. In an effort to avoid seeking surrender of its license, FPL Energy, in May 2002, asked the signatories to amend the KHDG Agreement to allow installation of a Canavac fish pump in lieu of the required fish lift, with the provision that, if evaluations showed the pump did not meet the agencies' fish restoration goals, it would be removed by

[12] Final EA at pp. 90-91. FPL Energy itself acknowledges that the Canavac pump has been used extensively in the aquaculture industry to collect captive fish and deliver them for processing, but has not been used for transport to spawning areas or hatchery locations, and has not been tested at dams.

May 1, 2008, and the required lift facility would be installed. Both Interior and the Kennebec Coalition rejected this proposal, for reasons similar to those mentioned above.[13]

27. In an order issued July 28, 2003, we noted FPL Energy's apparent preference for retaining its license and continuing project operations if a less expensive fish passage option were available. FPL Energy Maine Hydro, LLC, 104 FERC ¶61,135 (2003). Because we were reluctant to eliminate a source of clean, renewable energy if we could provide simultaneously for continued project operation and effective fish passage, and because the Final EA had concluded that the Canavac fish pump might be effective, we directed the licensee to initiate discussion with the other parties to the 1998 KHDG Agreement regarding fish passage alternatives that would allow continued operation of the project. We required the licensee to file a report, no later than 6 months from the issuance date of that order, detailing its attempts to initiate such discussions, the status of any discussions that had occurred, and any resolution that had been reached. We also stayed the permanent upstream fish passage requirements of the license that implemented the 1998 KHDG Agreement pending receipt of the status report and our further action.

28. By letter of August 1, 2003, FPL Energy notified the Commission that, in response to our stay order, it had met with the other signatories to the KHDG Agreement to discuss again the possibility of using alternative means of fish passage at the project. FPL Energy stated that most of the signatories reaffirmed their position that only a fish lift or dam removal would satisfy the terms of the KHDG Agreement and the State of Maine's fish restoration goals. Because the signatories agreed that it would not be productive to continue discussions regarding fish passage alternatives, FPL Energy requested that we approve its application expeditiously, and particularly by September 22, 2003, since the KHDG Agreement requires installation of the fish lift unless the license has been surrendered and the Commission has ordered the dam "decommissioned" by the summer of 2003.

29. On September 26, 2003, the Commission issued notice that Commission staff would be conducting a technical meeting to discuss alternative means of fish passage at

[13] November 27, 2002 FPL Energy letter to the Commission. This letter was submitted in response to a November 20, 2002 request of Commission staff for information regarding FPL Energy's exploration of the alternative fish pump with other KHDG parties, including any relevant correspondence and responses related to that proposal.

the project pursuant to the Commission's stay order. The notice indicated that the discussion would focus on FPL Energy's August 2003 status report, information filed with the Commission by the various parties concerning the viability of fish passage alternatives, the advantages and disadvantages of using fish pump technology for fish passage, goals for number of adult fish returning to the Sebasticook River, and current estimates for returning fish to the Sebasticook and Kennebec Rivers.

30. The meeting was held on October 16, 2003, at Waterville, Maine. Following the meeting, the Commission received filings from several parties and other individuals and organizations with an interest in the proceeding. The filings take varying positions on the potential effectiveness of the Canavac fish pump and on the status and goals of fishery restoration in the river. However, none of signatories to the KHDG Agreement submitted any filing indicating that the information developed at the meeting had caused it to change its position on the inadequacy and unacceptability of using fish pump technology to achieve fish passage at the project or on the necessity of achieving fish passage only through either a fish lift or dam removal.[14]

31. Although the staff evaluated the use of a fish pump at the project in the Final EA and has attempted to develop additional information about the effectiveness of such a pump, requiring the licensee to provide fish passage through the existing or an improved fish pump is not an alternative that we could adopt in the context of this proceeding. FPL Energy has filed an application for license surrender, and we have stated consistently that a licensee is not compelled to continue operating a project if it wishes to surrender its license.[15] Only if FPL Energy had sought to amend its license to substitute a fish pump for the required fish lift could we have satisfied the dam removal opponents' requests to entertain the possibility of using this alternate method of fish passage. However, the licensee's ability to seek such an amendment is constrained by the terms of the KHDG Agreement. Neither the licensee's own efforts, nor the opportunity presented by our stay

[14] Of the KHDG Agreement signatories, only Kennebec Coalition filed post-meeting comments, in which it restated its opposition to a fish pump. However, Interior filed a protest in response to the notice of the technical meeting, and Maine DMR filed a letter objecting to the holding of the meeting. In light of our disposition of the issues in the text of this order, infra, we find it unnecessary to address these parties' objections.

[15] Niagara Mohawk Power Corp., 83 FERC ¶ 61,226 at 62,007 (1998); Fourth Branch Associates (Mechanicville) v. Niagara Mohawk Power Corp., 89 FERC ¶ 61,194 at n.60 (1999); Niagara Mohawk Power Corp. and Fourth Branch Associates (Mechanicville), 98 FERC & 61,227 at 61,903, reh'g denied, 100 FERC & 61,185 (2002).

order, nor the information presented at the technical meeting has caused the KHDG Agreement signatories to reconsider the fish passage provisions of that agreement for this project.

32. Having failed to obtain the consent of the other signatories to the KHDG Agreement for such a fish pump alternative, the licensee filed no amendment application, and the alternatives open to us are limited by the nature of the application that has been filed.[16] Since only a surrender application is before us, we cannot require the licensee to continue operating the project and to maintain the existing pump or install and operate an improved pump as a condition of continued project operation.

33. Under the circumstances present here, our options are to approve the surrender with partial or total dam removal or to approve it without dam removal. The staff analyzed the effect on resources of these alternatives. To summarize the Final EA's conclusions, dam removal would promote fish passage at the project site, convert about five miles of reservoir to riverine habitat, provide about five miles of additional unrestricted range for anadromous fish species and American eel, and improve water quality in the project area. However, elimination of the reservoir would result in loss of the existing reservoir habitat, loss or reduction of reservoir-based recreational uses and of the existing resident fishery, possible release of contaminated sediments, and increased potential for ice jams and ice scour below the dam site. Approving surrender of the license without dam removal would preserve the reservoir habitat and uses, and would avoid the sediment and ice jam impacts, but the provision of fish passage at the site would become uncertain.[17] As noted above, the Final EA did not recommend a particular alternative.

34. Some parties argue that the alternative of surrender without dam removal should not have been analyzed in the EA, in part because this alternative would be inconsistent with the KHDG Agreement provisions. We disagree; surrender without dam removal is properly subject to our consideration. As amended to reflect the fish passage provisions of the KHDG Agreement, the license for this project requires only that a fish lift be constructed. There is no license requirement for dam removal. The dam removal language simply specifies that, if the license were surrendered and the dam "decommissioned," the licensee would be excused from the fish lift requirement of its

[16] We could not, as some parties request, invalidate or modify the KHDG Agreement itself, since this is a private agreement.

[17] Final EA at pp. x-xiv.

license. In amending the license, we accepted the necessity for fish lift installation and operation as long as Fort Halifax were to remain a licensed, operating hydropower project. We did not make a commitment to ensure fish passage upon our relinquishment of jurisdiction, and we took no position on the advisability of removing the dam, in whole or in part, in comparison with leaving it in place. An evaluation of those alternatives is properly the subject of the environmental analysis conducted in response to the present surrender proposal.

35. Nevertheless, we think that surrender with partial dam removal, in accordance with FPL Energy's modified proposal, is the best alternative. Federal and state fisheries agencies, conservation groups, and hydropower project owners, including FPL Energy itself, have agreed on a carefully-developed plan for restoration of anadromous fish in the Sebasticook and lower Kennebec Rivers according to an established schedule. Given the clear support for the provision of anadromous fish passage as a long-standing fisheries goal in this river basin, we think it is in the public interest to provide for fish passage that would have been required if the license had remained in effect. To approve surrender without providing for some form of dam removal would create considerable uncertainty about the prospects for fish passage at the project site.[18]

36. The EA evaluated different dam removal alternatives. Among the partial removal (dam breach) alternatives, the Final EA recommended FPL Energy's modified, 87-foot-breach, proposal. Because only one 12-foot section would be removed initially, the time required for the reservoir to drain would be extended considerably over the drainage time that would be involved in the original, five-bay-removal proposal.[19] This slower drainage would benefit efforts to recover fish and mussels from the dewatered reservoir. Many

[18] We could not remove this uncertainty, and also preserve the dam, by requiring the installation and operation of a fish pump as a condition of approving the application for surrender. We do not require the installation of substantial new facilities at a project that will no longer be under license and over which we will no longer maintain jurisdiction. Project Decommissioning at Relicensing; Policy Statement, FERC Stats. and Regs. Preambles, **&** 30,011 at 31,223 (December 14, 1994). Even were we to require the installation of such facilities, we could not require their continued operation after the surrender became effective and our jurisdiction were terminated.

[19] For example, the Final EA estimates that, with an initial five-bay breach, it would take slightly more than 2 hours to draw the reservoir down 15 feet, whereas with an initial one-bay breach, it would take about 11 hours. Final EA at p. 67. Total drawdown time under the modified proposal is estimated at about 15 hours.

fish would be able to move out of areas being slowly dewatered, and the slower drawdown would allow personnel recovering mussels to cover the drawdown zone more effectively before mussels begin burrowing into the mud.[20] The wider complete breach of 87 feet, in comparison to the originally proposed 72-foot-breach, would be more beneficial to fish passage. The staff determined that, under the original proposal, high flow velocities occurring in the spring could partially block and delay the upstream migration of alewife if the total breach were only 72 feet, whereas alewife should experience little delay in passing through the wider breach.[21] We find these considerations convincing and adopt the Final EA's recommendation of the modified partial removal alternative.

37. The Final EA concluded that total dam removal would enhance fish passage at the dam site, because no part of the dam would remain to act as a hydraulic control.[22] However, the advantage of this alternative over the modified partial removal alternative is not significant, since the Final EA found that the 87-foot breach would be adequate to pass all species under almost all conditions. Moreover, total dam removal would require a longer demolition period, which would increase the potential for sedimentation due to in-river construction activities.[23] Total dam removal would also result in the total, rather than partial, loss of an historic structure. No party to this proceeding has advocated total dam removal, and we see no compelling reason to select it over the licensee's modified partial dam removal proposal.

38. Opponents of the licensee's proposal contend that a number of adverse effects would occur if we approve the licensee's proposal for partial dam removal. The staff evaluated the impacts of the partial dam removal on various resources, including ones about which the opponents expressed particular concern.

39. Some opponents express concern that drawdown of the reservoir will expose contaminated sediments. The Final EA found that, in one area of the reservoir about 3.5

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[20] Final EA at p. 67.

[21] Id. at pp. 74-76, 81. The narrower breach would also delay the migration of sturgeon in the spring if sturgeon were to occur in the project area. The delay would be less serious with the wider breach.

[22] Id. at p. 85.

[23] Id. at p. 93.

miles upstream of the dam, it is likely that sediments have accumulated, and that exposed sediments in the floodplain would be subject to inundation and potential erosion or resuspension. However, the Final EA concluded that concentrations of chromium in the impoundment sediments are below Environmental Protection Agency (EPA) guidelines, so that exposure of the sediments as mudflats after dam breaching would not result in human health impacts. Because the greatest risk of this erosion or resuspension would be if flood events occur before the newly exposed areas are revegetated, staff recommended that FPL Energy monitor stormwater outfall so that any erosion can be readily addressed.[24] We would include revegetation and stormwater outfall monitoring as conditions of the surrender.

40. The Final EA stated that the groundwater level in the immediate surrounding area of the impoundment would be lowered after the partial dam removal, but it concluded that expected effects on nearby wells would be relatively minor.[25] The Final EA found that partial dam removal would have only minor effects on the downstream flow regime, because the project is already operated run-of-river and the volume of the impoundment is not large enough to have a substantial effect on downstream flood conditions.[26]

41. The Final EA found that the dam and impoundment act to delay and store ice in the river, and that, once the dam is breached and the river returns to its normal regime, there could be an increase in ice jamming, due to the characteristics of the river at the project location and the narrowness of the breach.[27] The Final EA does not recommend any measures to mitigate for these effects, and we agree that this effect is not capable of any mitigation measures that we could impose in a surrender proceeding.

42. Freshwater mussels, including two state-listed species and two species of special concern, occur within the Fort Halifax reservoir and in the Sebasticook River below the dam. The Final EA found that most benthic macroinvertebrates and mussels would not be able to evacuate the newly dewatered areas during the time that the reservoir is being drawn down. Most fish would likely follow the receding water level and escape to areas that remain wetted, although some fish stranding would be possible. FPL Energy

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[24] Id. at pp. 26-30.

[25] Id. at p. 44.

[26] Id. at pp. 44-45.

[27] Id. at p. 48.

proposed an Incidental Take Plan (ITP) to minimize the take of the state-listed mussel species, as well as a fish rescue plan. The ITP would entail collecting and identifying mussels from the dewatered areas and returning them to suitable watered habitat. The Final EA recommended that the licensee consult with FWS and the Maine Department of Inland Fish and Wildlife in developing the specifics of the plans, and that the licensee be prepared to implement the plans as soon as the drawdown begins. The Final EA concluded that implementation of these plans should adequately mitigate for any stranding of state-listed mussel species and resident fish.[28] As we have already noted, the Final EA found that the modified breaching proposal would allow more time for these rescue efforts than would the original controlled demolition proposal, due to the longer reservoir drawdown time.

43. Some opponents of dam removal contend that elimination of the impoundment would adversely affect fish species and wetlands, and would create a degraded shoreline environment. The Final EA found that the change in environment from a lacustrine to a riverine habitat would result in the reduction of the populations of some species of fish, but that these would be replaced by other species that prefer riverine habitat.[29] A portion of the 90 acres of existing wetlands would be degraded with the drawing down of the impoundment, but wetlands would naturally reestablish in some areas along the river. Vegetation would colonize the exposed areas. Overall, the acreage of deciduous swamp, shrub swamp, and emergent marsh/wet meadow wetland cover types in the project area would remain about the same or increase slightly following dam breach. The Final EA concluded that there may be a slight shift from water-dependent species to upland species, but that some water-dependent species would benefit from the change in habitat. The breach would have minimal effect on species that frequent the project area for feeding, nesting, or breeding.[30]

44. Many of the opponents object to the loss of recreational activities that depend on the reservoir. As noted, the Final EA found that elimination of the reservoir will result in the loss or reduction of certain recreational activities; these include boat-based angling and waterfowl hunting opportunities, ice skating, ice fishing, snowmobiling, and carry-in boat access. However, the Final EA found that shoreline angling opportunities may

[28] Id. at pp. 63-66.

[29] Id. at pp. 68-69.

[30] Id. at pp. 97-98.

increase, and fish that now congregate at the base of the dam will be able to ascend into the restored riverine section.[31]

45. Because the provision of fish passage at the project site is a significant objective of the state and federal fisheries agencies, we would be reluctant to deny the dam removal portion of the surrender application unless there were clear environmental or policy reasons to outweigh this consideration. Our review of the effects of dam breach on other resources persuades us that partial dam removal will not have many adverse effects, and that most of these either can be mitigated by conditions that we will require as part of our approval of the surrender or will be offset by beneficial effects. Therefore, we will approve the surrender and the licensee's modified dam breach proposal.

46. The Commission's regulations, at 18 C.F.R. ' 6.2 (2003), state that, for projects such as Fort Halifax, that do not occupy federal lands, licenses "may be surrendered only upon the fulfillment by the licensee of such obligations under the license as the Commission may prescribe . . . ." The Final EA recommended a number of mitigative measures to be undertaken by the licensee if the proposed action were granted.[32] In accordance with those recommendations, we will require the licensee to file a plan demonstrating the measures it has taken. These include removal or modification of any blockages to fish migration that may be present after the impoundment is drawn down; recovery efforts in the reservoir reach for any fish or mussels stranded during the dam breaching process; and measures to control erosion and revegetate areas with a high erosion potential. We will also require the licensee to undertake measures agreed upon in the MOA for cultural resources. Finally, we will require the filing of plans and specifications before undertaking demolition and documentation that the licensee has left the remaining project structures in a safe and stable condition. The surrender will not be effective until all of these conditions have been satisfied.[33]

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[31] Id. at p. 109.

[32] Id. at pp. 120-21.

[33] The Final EA also recommended that the licensee monitor water velocities, water elevations, and fish passage through the breach at higher flow levels, with possible widening of the breach to reduce velocities if significant delays are evident. As we have discussed, the licensee's modified breach proposal satisfies previous concerns about fish passage problems at higher velocities. We do not retain jurisdiction that would involve us in future fish passage issues at the project site.

Other issues

47. Many of the opponents complain that they did not have an opportunity to participate in the formulation of the KHDG Agreement, and that they were therefore unfairly deprived of meaningful participation in a decision made by others to remove the dam. It is true that the KHDG Agreement was a private agreement to which they were not signatories. Proponents of the dam removal proposal argue that public notice was issued of the application to amend the Fort Halifax Project license, as well as the other KHDG project licenses, to incorporate the fish passage provisions of the agreement, and that the local landowners and entities had an opportunity to provide comments at that time. However, the amendment application sought a requirement for installation of a fish lift, not for dam removal.

48. Lack of opportunity to participate in the formulation of the KHDG Agreement did not deprive these entities of an opportunity for effective opposition to dam removal, because neither the agreement nor the amended license obligates anyone to remove the dam. The agreement, by itself, would not have been sufficient to bring about dam removal as long as the project remained under license, because the dam is a licensed project work whose removal could only occur with the Commission's approval. Moreover, as we have explained, the incorporation into the license of the agreement's fish passage provisions did not obligate the Commission to require removal of the dam if the fish lift were not installed. Whether to authorize removal of the dam is a decision to be made by the Commission in the present surrender proceeding, in which the opponents of dam removal have had full opportunity to participate. Our decision here to require partial dam removal is not dictated by the agreement but rather is based on our consideration of the entire record before us in this proceeding.

49. Some commenters ask who will be responsible for maintaining the dam after surrender. Kennebec Coalition suggests that there may be a need for regular maintenance at the dam to remove debris or other obstructions that may lodge across or at edges of the breach. Maine Planning Office recommends that FPL Energy take necessary precautions to ensure that the structural integrity of any remaining dam structure will not pose a threat to public safety, and that it develop a plan, in consultation with area communities and appropriate agencies, to address public safety issues and concerns at the site both during and after dam removal.

50. As we have stated, we are imposing conditions on the surrender to ensure that the remaining facilities will be in a safe and stable condition during and after completion of the partial dam removal. FPL Energy acknowledges that if debris build-up occurs in the future, it would be responsible for removing the accumulated material before a dangerous condition is created. However, after the conditions of the surrender are satisfied and the

surrender becomes effective, the Commission retains no continuing jurisdiction over the project site, and the nature and extent of any future responsibilities of FPL Energy or any succeeding dam owner will no longer be determined by the Commission. We will not impose conditions on FPL Energy that we will not have the authority to enforce.

51. Some commenters insist that FPL Energy should provide access for canoeing and fishing, provide trails, and establish safe river crossing areas. Kennebec Coalition maintains that public access above and below the dam site should be provided. It complains that FPL Energy does not identify future plans to undertake work in connection with recreational facilities that may be affected by the change in water levels resulting from the breach, and does not indicate whether these facilities will continue to be open to the public. Maine Planning Office states that, if reasonable and formal alternative access is not available to those sections of the river and former impoundment currently served by the licensee's carry-in facility at the impoundment, the facility should be renovated as necessary in order to continue to provide adequate public access to the water. Maine IFW states that measures to assure a continued opportunity for public use will need to be provided following project decommissioning and partial dam removal if FPL Energy subsequently sells the property to non-hydropower interests.

52. FPL Energy states that it has no present plans to change its policy of allowing public access on its lands for recreational purposes. However, we will impose no requirement on FPL Energy to undertake recreational use measures after surrender. As we have stated in other proceedings, it is not appropriate for us to place encumbrances on a licensee's ownership of project lands after our jurisdiction has ended.[34]

53. The Town of Winslow installed a sewer line across the impoundment in the late 1970's. The line consists of two eight-inch, double-siphon pipes, which cross the reservoir about 330 yards upstream of the dam. The Town and numerous local residents express concern that, after drawdown of the impoundment, this sewer line would be exposed, and, if it were ruptured, could deposit raw untreated sewage into river. The Town states that, according to the estimate of its consulting engineer, the cost to replace the pipes might approach $300,000. Several commenters argue that the licensee should be required to replace the sewer line or compensate the Town for any work that must be done to protect it. FPL Energy states that the Town received an easement from the licensee to install the sewer line through the impoundment, that the licensee did not guarantee the maintenance of a certain water level in the impoundment, and that the Town expressly agreed that it would be responsible for any modifications that might be

[34] Niagara Mohawk Power Co., 98 FERC & 61,227 at 61,902-03.

necessary to ensure that there would be no adverse environmental impacts created by the line's installation, maintenance, or replacement.

54. In February 2003, engineering consultants for FPL Energy conducted a diver inspection of the sewer line, and in March 2003, FPL Energy filed the consultants' report of the inspection. The inspection determined that the two sewer pipes are buried in the reservoir bottom for most of their length underwater, although about 15 feet of one pipe and 26 feet of the other are exposed approximately mid-channel. The report predicted that, with the removal of the dam, the relatively fine sediment covering some of the line would wash away and potentially expose about 150 feet of the line. It stated that the degree of necessary long-term pipe protection will not be known until after the dam is breached and a thorough survey and inspection of the crossing area can be completed.

55. The reservoir is part of the licensed Fort Halifax Project works, and use of a licensed reservoir for non-project uses is subject to Commission approval. Central Maine, then the licensee, filed an application for such approval in 1977, and the Commission authorized Central Maine to grant a permanent easement over project lands for the construction, operation, and maintenance of the sewer line. Central Maine Power Co., 59 FPC 2297 (1977).[35] The proposed conveyance of the easement included covenants to ensure that the use would not be incompatible with the project uses and environmental values of project lands and waters. Any dispute about the dam owner's liability to the Town following surrender of the license would properly be resolved under state law.

56. A number of landowners are concerned with the issue of establishing property rights after the impoundment is drawn down. Although the licensee appears generally to hold property rights up to the high water line, some commenters claim that it is not clear that all landowners will own to the river once the impoundment is drained, because some landowners deeded their land to the Fort Halifax Dam Company between 1900 and 1912. They contend that we should establish who owns the land that will be exposed as a result of dam removal, by requiring the licensee to conduct boundary surveys and title work. Some urge us to require the licensee to extend property lines to the new high water mark, provide clear title to existing abutting landowners, and deed land back to current owners, where properties were deeded to the power company to allow the flooding for the dam when it was constructed.

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[35] The Commission's order noted that the pipes were to be buried at least two feet below the riverbed; if that minimum could not be met due to the presence of bedrock, concrete was to be used to encase the pipe with a 6-inch cover.

57. Our responsibilities in authorizing a surrender of a license are limited to ensuring that the licensee takes appropriate steps to leave the former project property in an appropriate condition. Issues over property rights are properly resolved in a state forum.

58. Some commenters complain that the loss of the dam will decrease the Town's tax base, with financial consequences that will fall on local residents, and argue that the licensee should compensate the Town for that loss. One commenter argues that an escrow account should be provided by the licensee to cover all expenses incurred by dam removal, including FWS enhancements, plus revenue that the dam would have provided to the Town. We have stated that the termination of any business venture reduces tax revenues to governments, but this is not a reason to deny a surrender application. Niagara Mohawk Power Corporation, 83 FERC **&** 61,226 at n.12 (1998). Similarly, there is no reason a licensee should compensate a government for the loss of such tax revenues upon cessation of its operations.

59. This order authorizes the surrender of the license, subject to the conditions we have discussed above. The surrender will not be effective until issuance of a Commission notice that all of the conditions have been satisfied. Until then, the project remains under license.

60. Interior, the Kennebec Coalition entities, the State of Maine, and Friends of the Kennebec Salmon filed requests for rehearing of our July 2003 Order staying the fish lift license requirement and directing the licensee to enter discussions. These parties asked that we set aside our stay order and expeditiously issue an order approving surrender and dam removal. In light of our disposition of the surrender application in the present order, it is unnecessary to address their arguments, and we will dismiss the requests for rehearing as moot.

The Commission orders:

(A) The application filed June 20, 2002, by FPL Energy Maine Hydro, LLC, for surrender of its license for the Fort Halifax Project No. 2552 is granted.

(B) The licensee shall partially remove the Fort Halifax Project dam in accordance with its modified proposal of February 12, 2003, for removing six bays of the dam, totaling 87 feet, with an initial removal of one 12-foot-wide bay using explosives and, following complete drainage of the project reservoir, removal of the remaining five bays using mechanical demolition.

(C) The licensee shall implement its proposals to: (1) monitor storm water outfall that does not have rip-rap and address any erosion issues; (2) minimize the incidental take of mussel species by implementing the Incidental Take Plan already prepared in consultation with the Maine Department of Inland Fisheries and Wildlife; and (3) conduct a fish rescue effort that will be implemented at the same time as the survey for stranded mussels. The licensee shall survey the reservoir after draining for any areas of blockage to fish migration and make any modifications needed to clear the blockage if such obstructions are present. The licensee shall also survey the area around the reservoir and make a one time effort to revegetate areas with a high potential for erosion with a conservation seed mix appropriate for the area. Within 60 days of draining the reservoir, the licensee shall file with the Commission a report describing its efforts to implement the above proposals and indicate if and when any mitigative actions were taken.

(D) The licensee shall implement the "Memorandum of Agreement Between the Federal Energy Regulatory Commission and the Maine State Historic Preservation Officer Regarding the Surrender of License for the Fort Halifax Hydroelectric Project (FERC No. 2552)", executed on June 17, 2003. Within 30 days of draining the reservoir, the licensee shall forward all archaeological documentation specified in the Memorandum of Agreement to the Maine State Historic Preservation Officer (SHPO) and any other repository designated by the SHPO. Within 60 days of draining the reservoir, the licensee shall file a report showing that it has implemented the Memorandum of Agreement.

(E) Within 60 days from the date of issuance of this order, the licensee shall file with the Commission, for approval, a plan to retire the Fort Halifax Project and partially remove the Fort Halifax dam in accordance with Ordering Paragraph (B). The plan shall include, but need not be limited to, a detailed description of:

(1) the decommissioning of the hydroelectric generation facilities, including, but not limited to, actions to: permanently seal the powerhouse intake; disconnect the electrical connection; lock or seal all project doors and gates; cover or otherwise protect all windows to reduce opportunities for vandalism and entry; and remove any toxic materials, such as lubricants, hydraulic fluids, solvents, and batteries, that may be stored in the powerhouse;

(2) the partial Fort Halifax dam removal process and sequence, including measures to control sedimentation and erosion, and to ensure that the remaining portions of the dam are safe;

(3) final site restoration;

(4) cost estimates for the entire proposal and sources of financing; and

(5) an implementation schedule.

In addition to the copies of this plan required to be filed with the Secretary of the Commission, three copies are to be filed with the New York Regional Engineer.

The licensee shall prepare the plan after consultation with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, National Marine Fisheries Service, Maine Department of Conservation, Maine Department of Environmental Protection, Maine Department of Marine Resources, Maine Department of Inland Fisheries and Wildlife, Maine State Historic Preservation Officer, the Maine Department of Transportation, the Maine Dam Safety Office, and Kennebec County. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission for approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The plans shall not be implemented until the licensee is notified the plan is approved. Upon approval, the licensee shall implement the plan, including any changes required by the Commission.

In addition, three copies of: (1) a public safety plan for the decommissioning/dam removal period; (2) a Construction Quality Control Inspection Program (CQCIP); (3) a Temporary Construction Emergency Action Plan (TCEAP); (4) a blasting plan; (5) a soil erosion and sediment control plan; and (6) final contract drawings and specifications for breaching and removing the Fort Halifax Dam must be submitted to the Commission's New York Regional Office, for approval, at least 60 days prior to start of construction/removal activities. No construction or removal activities may commence until authorization is given by the Commission's New York Regional Office.

(F) Within 30 days of completing project retirement and dam removal activities, the licensee shall submit a report documenting the structural adequacy of the remaining project features. The report should describe any effects dam removal activities have on the stability of the remaining structures. The surrender will not be effective until the

Commission's New York Regional Office performs a final site inspection and issues a letter indicating that the report and the condition of remaining structures are acceptable.

(G) The requests filed by Interior, the Kennebec Coalition entities, the State of Maine, and Friends of the Kennebec Salmon for rehearing of the Commission's July 28, 2003 Order in this proceeding are dismissed.

By the Commission. Chairman Wood concurring with a separate statement attached.
Commissioner Kelly not participating.

(S E A L)

Magalie R. Salas
Secretary

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

FPL Energy Maine Hydro, LLC Project Nos. 2552-058 and 2552-063

(Issued January 23, 2004)

Wood, Chairman, concurring:

In 1998, FPL Maine Hydro agreed to a settlement to either install a fish lift at the Fort Halifax Project or surrender its license by 2003. However, given the economics of installing the fish lift, surrender was FPL Maine Hydro's only choice despite its desire to continue to operate the project. The Commission staff's Final Environmental Assessment concluded that the less costly Canavac fish pump would likely function much as the lift in allowing fish passage. We directed the signatories to the KHDG Agreement to meet to discuss the installation of the fish pump in an attempt to keep the project in operation last July. Later, we directed our staff to conduct a technical conference to discuss the viability of using the fish pump. Both attempts failed to get the signatories to accept the use of the fish pump for even a year. Hence, we are left with accepting the surrender of the license for this project. The local landowners and communities surrounding the project will be left without the beauty and recreation provided by this project as a result of the partial removal of the dam. I hoped the parties would have been willing to explore new technological alternatives to a solution required by a six-year old agreement. As they were not, we are left with the only available option – accept the surrender. I regretfully concur.

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Pat Wood, III
Chairman